

History of Aerial Overview Methodology Changes

YEAR	Description of Changes
2003	GIS: Large polygons had non-timber portions clipped to more accurately depict the area of damage.
2004	Added trace (<1%) and very severe (>50%) only for mortality agents, primarily to describe IBM (and low levels of IBB).
2005	Added in "G" (grey) for cumulative serious defoliation that results in polygons of mortality. To be mapped only once the year after the outbreak is finished.
2006	Yellow cedar decline added (NYC)
2007	Added primary host tree species to information collected and delineated "Y" (young) damaged trees, primarily for IBM (e.g., Ply recorded in the host species column).
2009	Further refined "Y" to refer only to regeneration in clearcut areas, and classified small understory trees (that may be young or just suppressed) under gray IBM mature stands as "U/S".
2011	Foliar damage was always described only as polygons, not spots, due to the widespread nature of the damaging agents. Now making exceptions to use spots for some diseases, specifically: larch needle blight that affects individual or small clumps of larch within a stand of non-host tree species and Venturia blight which was observed in the Northeast to be only affecting small clumps (clonal??) of aspen despite being within aspen stands that weren't affected. Still recording insect defoliation only as polygon damage though.
2012	<p>Adopted USDA criteria for their aspen decline to be used for both aspen and birch decline, but coded it L, M, S to match the defoliator coding as follows:</p> <p>L- No mortality but thin crowns M- Light to moderate mortality, thin crowns and some individual trees devoid of foliage but greater than 50% of trees have some foliage. S- Heavy mortality, crowns are very thin and greater than 50% of standing stems to not have foliage.</p> <p>For serpentine leafminer, decided that traditional defoliation categories don't work well as damaged aspen that are visible from the air tend to have most of the crown affected (an all or nothing scenario). Therefore agreed to map the same way mortality is, as a percentage of the stand affected in a drawn polygon (hence the percentage that is damaged aspen vs. other non-host species). Decided to stick to light, moderate and severe categories only though, to cause less confusion with other defoliators.</p>

	To be more inclusive of foliage diseases and leaf miners, “defoliation” is now referred to as “foliage damage” for reporting purposes.
2017	Ground check form (Excel) standardized to collect details on ground calls and the results of expert identification.
2018	<p>To address the issue of distinguishing post-fire mortality of young pine, (NBP) from drought (ND), NBP would only be recorded for up to four years after the fire.</p> <p>Three new pest codes added: IAP - pine needle scale, <i>Chionaspis (Phenacaspis) pinifoliae</i> - new pest code needed to incorporate some old FIDS data from 1972. NDM - “Drought caused - Mortality” NDF - “Drought - Foliage Loss/Damage”. The NDF could cover off anything from foliage discolouration/loss to top kill, anything that isn’t outright tree mortality</p> <p>Early season foliar disease flights introduced to capture damage that is not visible later in the summer when the survey is normally conducted. A reconnaissance flight is done prior to initiating the survey to determine if there is enough damage to warrant the special flight and to what areas it would be necessary to cover. Foliar disease areas mapped should increase with the introduction of this early season flight.</p>